Executive Summary

ES.0.0.1. This report summarizes physical and analytical data collected during field investigations for the Basewide Cone Pentrometer Testing (CPT) Investigation performed at Hill Air Force Base (HAFB or Base), Utah. Data presented in this report were collected between November 22, 2002 and February 11, 2003. The investigation was performed in accordance with the *Basewide Quality Assurance Project Plan (BQAPP)* and the *Basewide Cone Penetrometer Testing Investigation Work Plan* (Work Plan) (CH2M HILL, 2002).

ES.0.0.2. HAFB Environmental Management and Restoration initiated the Basewide CPT investigation program in 1999. The objective of the program was to fill in data gaps at areas along the Base boundary between existing hazardous waste investigation sites where groundwater has the potential to migrate off-Base. The Basewide CPT Investigation was conducted at two locations at HAFB. The 1st investigation area was focused along the Southwestern Base Boundary, east of the Truck Gate in the area of the Patriot Hills Housing Development. The CPT points in this area were evenly spaced along the boundary. Upon completion of the groundwater sample analysis, a second phase of investigation was performed in this area. The CPT and analytical data obtained from Phase I were used to locate the remaining CPT points in areas where contamination was detected and/or areas where geologic data indicated potential groundwater flow.

ES.0.0.3. The initial scope of work for the investigation consisted of driving 30 CPT points to an approximate depth of 140 feet below the ground surface and collecting three groundwater samples at each location. However, the number of groundwater samples collected at each point was determined by the number of saturated sand zones present. For the entire investigation, a total of 28 CPT exploration points were driven and 77 groundwater samples were collected. Groundwater samples were analyzed for volatile organic compounds by Environmental Protection Agency method SW846-8260. Benzene was detected in one groundwater sample above its maximum contaminant level (MCL) at a concentration of 6.5 micrograms per liter. All remaining samples were either nondetect or were below MCLs for all analyzed compounds.

ES.0.0.4. The second investigation area was located inside the Munitions and Missile Storage (MAMS) Area in the middle of the Base. Six CPT points were driven in this area and refusal was encountered at all six points before groundwater was encountered. No groundwater samples were collected in the MAMS Area.